REMARKS

Entry of the foregoing amendment and reconsideration of the restriction requirement set forth in the Office Action Dated October 17, 2006 is respectfully requested. Claim 13 is amended to correct a typographical error. Claim 15 is amended to better describe the claimed subject matter by making explicit what was previously implicit, that is to recite that the probes recited therein hybridize under normal conditions to sequences that can be amplified using the probes recited in claim 14. Support for the amendments may be found at least in the claims as originally filed.

The Office Action sets forth a restriction requirement between Group I, comprising claims 1-13 directed to methods of using recited primers and probes for detecting and identifying bacterial species and Group II, comprising claims 14, 15, and 19-22 directed to probes and primers. The Office Action sets forth further requirements for election of a bacterial species and a probe or combination of probes identified by SEQ ID NO as recited in claims 5, 15, and 19. The restriction requirement is traversed.

The Office correctly notes that this application is a national stage application under the PCT and is therefore subject to unity of invention practice under 37 C.F.R. § 1.499 and Manual of Patent Examination Procedure § 1893.03(d). "A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art." M.P.E.P. § 1983.03(d). Pursuant to 37 C.F.R. § 1.475 (b)(2), "an international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of

the following combinations of categories: . . . A product and process of use of said product . . ."

The Office alleges that Groups I and II do not relate to a single general inventive concept. The Office has characterized the claims as directed to detecting and identifying bacterial species by use of probes to topoisomerases. The Office alleges that U.S. Patent Number 6,346,397 (Warren et al.) teaches the use of probes comprising topoisomerase nucleotide sequences for screening genetic mutation.

The Office has not fully apprehended the special technical feature shared by each of the present claims. Each of the claims as currently presented contain a special technical feature represented by the use of primers associated with SEQ ID NOS: 76 and 77, which amplify regions of the gyrB and parE genes, and probes specific for the gyrB and parE genes. Warren et al. specifically provides polynucleotides encoding gyrA and discloses only the use of probes and primers associated therewith. Warren et al. does not teach or suggest SEQ ID NOS: 76 or 77, or probes and primers associated with gyrB and/or parE. Thus, each of the claims as currently presented share a common special technical feature that is not taught or suggested in the prior art.

Therefore, all of the claims share unity of invention and should be examined together. Furthermore, the Office has improperly applied U.S. restriction practice to this national stage application under the PCT in asserting the requirements for further restriction. Therefore, the requirements of further restriction are also traversed. The Office has not adduced any basis for asserting that the claims, taken as a whole, do not share unity of invention in reciting bacterial species and the various probes that may be utilized individually or in combination in the claimed methods.

If the requirements for electing a bacterial species and one or a specific combination of probes from among SEQ ID NOS: 1-69 is maintained, the claims are at least entitled to be treated as set forth in Manual of Patent Examination Procedure § 803.02 and 809. Claim 1 is generic to the various embodiments recited in claims 3, 5 and 6 and links claims 5 and 6. Claim 5 recites a proper Markush grouping of related molecules. Each of the probes is a nucleic acid molecule sharing a common chemical backbone structure and common functional properties in that the listed nucleic acids are all capable of hybridizing to the hypervariable regions of topoisomerase sequences that can be amplified by SEQ ID NOS: 76 and 77, in particular to regions of the parE and gyrB genes. If the claims reading on the elected species is found allowable, then the requirements must be withdrawn and examination expanded to include generic claims.

For at least the foregoing reasons the requirement for restriction is traversed. However, simply in order to present a fully responsive reply, Applicants elect Group I, comprising claims 1-13, the bacterial species Staphylococus aureus, and the probe identified by SEQ ID NO: 24.

A notice of Allowance is believed to be next in order and such action is earnestly solicited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: November 17, 2006 By: 

Christopher L. North
Registration No. 50433

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620